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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/576,225

03/12/2007

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40149/01401

6936

30636 7590 06/18/2010
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EXAMINER

PHAM, MINH CHAU THI

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

06/18/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/576,225
Filing Date: March 12, 2007
Appellant(s): SCHULTINK, JAN

Oleg F. Kaplun
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed on May 5, 2010 appealing from the Office action mailed September 21, 2009.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1-9 and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fesco (3,738,091), in view of Zhang (6,156,086).

Claims 20-24 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fesco (3,738,091), in view of Zhang (6,156,086), as applied supra, and further in view of Hall et al (6,009,925).

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION." The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

3,738,091	Fesco	6-1973
6,156,086	Zhang	12-2000
6009925	Hall et al.	01-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-9 and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fesco (3,738,091), in view of Zhang (6,156,086).

Fesco discloses a filter bag (20) for a vacuum cleaner comprising a substantially tubular bag having a closed free end (28) and at least partially closed area opposite

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the closed free end area (28) (see Figs. 1-4, col. 3, lines 1-9), and a retaining plate (30) wherein edges of the bag (20) are at least partially interconnected (26) by a weld seam to form the at least partially closed area (see Figs. 1, 5 & 8, col. 3, lines 1-18, lines 9-18, lines 23-36, lines 46-51 and line 60 through col. 4, line 18). Fesco further discloses the seam in the bottom of bag extends over an entire width of the bottom (28, see Fig. 3). Fesco also discloses the filter bag having pre-creases being introduced into the bag material with seam in the bottom (68 in Fig. 6) and up to the closed free end area (see 74, 76, 80 in Fig. 6). Fesco also discloses the retaining plate (30) having a through hole (see Figs. 1 & 5). Fesco further discloses a method of manufacturing a filter bag (20) for a vacuum cleaner comprising the steps of providing a substantially tubular bag having a closed free on end (28) and at least partially closed area opposite the closed free end area (28) (see Figs. 1-4, col. 3, lines 1-9), and a retaining plate (30) wherein edges of the bag (20) are at least partially interconnected (26) by a weld seam to form the at least partially closed area (see Figs. 1, 5 & 8, col. 3, lines 1-18, lines 9-18, lines 23-36, lines 46-51 and line 60 through col. 4, line 18). Fesco further discloses the step of connecting plies in the bottom as a result of folding the seam in the bottom of bag extending over an entire width of the bottom (28, see Fig. 3). Fesco also discloses the filter bag having pre-creases being introduced into the bag material with seam in the bottom (68 in Fig. 6) and up to the closed free end area (see 74, 76, 80 in Fig. 6). Fesco also discloses the retaining plate (30) having a through hole (see Figs. 1 & 5). Claims 1-19 and 11-18 differ from the disclosure of Fesco in that the filter bag made of a bag material having at least one non-woven composite layer having a weld seam.

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Zhang discloses a dual media vacuum cleaner bag including at least two sidewalls which sidewalls are joined by thermal seams (see Abstract). Zhang further discloses the bag is made by a composite filter material laminate (21) usable to form a second panel or sidewall of the vacuum cleaner bag. The inner non-woven filter layer (23) is comprised of a non-woven web, and the non-woven filter layer (23) can be a melt blown microfiber non-woven web (col. 2, line 59 through col. 3, line 3, col. 3, lines 11-12). Zhang also discloses the edges of the bag are interconnected by a weld seam via ultrasonic welding or heat bonding (see col. 7, lines 59-67, col. 8, lines 18-22). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to substitute the vacuum bag material of Fesco by the composite bag material as taught by Zhang with a weld seam since it is well known in the art that the vacuum cleaner bag made from the composite laminate material would provide a filter media having high capture efficiency for fine particles with a relatively low pressure drop, hence, a desire for high levels of filtration performance coupled with good mechanical performance at lower costs.

Claims 20-24 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fesco (3,738,091), in view of Zhang (6,156,086), as applied supra, and further in view of Hall et al (6,009,925).

Fesco discloses a method of manufacturing a filter bag (20) for a vacuum cleaner comprising the steps of providing a substantially tubular bag having a closed free end (28) and at least partially closed area opposite the closed free end area (28) (see Figs. 1-4, col. 3, lines 1-9), and a retaining plate (30) wherein edges of the bag (20) are

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at least partially interconnected (26) by a weld seam to form the at least partially closed area (see Figs. 1, 5 & 8, col. 3, lines 1-18, lines 9-18, lines 23-36, lines 46-51 and line 60 through col. 4, line 18). Fesco further discloses the step of connecting plies in the bottom as a result of folding the seam in the bottom of bag extending over an entire width of the bottom (28, see Fig. 3). Fesco also discloses the filter bag having pre-creases being introduced into the bag material with seam in the bottom (68 in Fig. 6) and up to the closed free end area (see 74, 76, 80 in Fig. 6). Fesco also discloses the retaining plate (30) having a through hole (see Figs. 1 & 5). Zhang discloses a dual media vacuum cleaner bag including at least two sidewalls which sidewalls are joined by thermal seams (see Abstract). Zhang further discloses the bag is made by a composite filter material laminate (21) usable to form a second panel or sidewall of the vacuum cleaner bag. The inner non-woven filter layer (23) is comprised of a non-woven web, and the non-woven filter layer (23) can be a melt blown microfiber non-woven web (col. 2, line 59 through col. 3, line 3, col. 3, lines 11-12). Zhang also discloses the edges of the bag are interconnected by a weld seam via ultrasonic welding or heat bonding (see col. 7, lines 59-67, col. 8, lines 18-22). Claims 20-24 and 26-29 differ from the disclosure of Fesco and Zhang in that the method comprises the step of introducing a die to an open side of the bag so that the bottom of bag is closed. Hall et al disclose a method of joining thin sheets of thermoplastic materials along welded seams formed at their edges or the seam (see col. 1, lines 5-10 and lines 16-17, col. 2, lines 38-60) via a welding die (28) (see col. 5, lines 8-20, col. 10, lines 28-47). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to

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adopt the step of introducing a die to facilitate welding of the filter bag of Fesco and Zhang since it is well known in the art that the method of joining the two edges along a welded seam provides excellent seam integrity and Zheng clearly indicates sealing seams.

(10) Response to Argument

Appellant argues that the cited prior art Fesco does not have a pre-crease parallel to the weld line. However, it appears that Fesco does note the pre-creases (see 68, 70, 72 in Fig. 6). Appellant continues to argue that a folding line is not a pre-crease. However, such does not appear to be any different as a crease being a line made by folding, i.e. a pre-crease then being a fold line. Fesco discloses the fold lines are scored, i.e. formed by a tool the same as the pre-crease of Appellant and as admitted by Appellant in the specification, paragraph 0014 as "introduced by a suitable forming tool", so there is no difference between a pre-crease and a scored fold line. Appellant further defines precrease as material compressions which are configured linear see par 0014 of instant spec, ie scored lines, as such linear compressions are made by a forming tool or welding. Moreover as readily apparent from applicant's instant specification the pre crease functions as a fold line. It is not seen then how the precrease of applicant is any different from the fold line of Fesco.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Respectively submitted

/Minh-Chau T. Pham/

Examiner Art Unit 1797

/Duane Smith/

Supervisory Patent Examiner, Art Unit 1797

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